

# Panel Finds Flaws in Plan For Weapon

By WILLIAM J. BROAD

The Bush administration's plan to develop a nuclear weapon that could penetrate the earth and destroy underground enemy bunkers while minimizing civilian casualties is flawed, the National Research Council concluded in a report made public yesterday.

The report said the weapon could not go deep enough to eliminate fallout, as some advocates have asserted, and it estimated that the victims in a nearby city could range from a few hundred to more than a million, depending on factors like the weather and population density.

John F. Ahearne, an expert on nuclear arms who headed the 15-member committee that wrote the report, said an earth-penetrating weapon "could kill a devastatingly large number of people."

The report also said that trying to reduce fallout and civilian damage by making a very small weapon was impractical because its destructive force would be insufficient to destroy military targets.

The report's conclusions are generally in line with criticisms made by experts outside the government, but it draws upon secret federal studies and carries the political weight of the National Research Council of the National Academies, the nation's leading scientific advisory group.

In Washington, debate over the Robust Nuclear Earth Penetrator, known as the bunker buster, has swirled for more than three years. Bunkers are proliferating in potential enemy states, mainly as underground command posts and arms caches. As a deterrent, the administration wants arms that can threaten such bunkers.

Critics contend that military intelligence can never ensure that the weapons hit the right targets and that the arms might fail to work. They also say that the weapon could create an illusion of limited consequences that could lead to wide nuclear conflict.

The new study was mandated by Congress in the 2003 Defense Authorization Act in an amendment sponsored by Representative Tom Allen, Democrat of Maine. "No one was willing to talk about the consequences," Mr. Allen said.

The report concedes that if a warhead penetrates 10 or so feet into the earth before detonating, much of its energy will go into the ground, forming a shock wave that can destroy underground structures.

But it also found that attacking bunkers at depths of 650 feet would require a blast of 300 kilotons, or 20 times larger than the bomb that destroyed Hiroshima. A target 1,000 feet deep would require a weapon 67 times as large.

The size of the weapons means they would produce much radioactive fallout and deadly debris, the report found.